

# Influenza Surveillance Report

Division of Disease Prevention and Control

Public Health Informatics

CDC MMWR Week 40:

September 29, 2019 to October 5, 2019

Influenza Activity by County, State, and National Levels

| Houston/ Harris County: | Texas:    | CDC:      |  |  |
|-------------------------|-----------|-----------|--|--|
| Increased               | Increased | Decreased |  |  |

#### **Highlights**

• The Houston Health Department (HHD) conducts seasonal influenza surveillance from October (week 40) to May (week 22). In week 40, the percentage of reported influenza-like illnesses (ILI) detected in emergency centers in Houston/Harris County was 0.87% which *increased* from the previous week. The flu vaccine is recommended for the entire season.

#### Influenza Like Illness (ILI)

• The percentage of Athena ILI reports *increased* to 0.21% in week 40 compared to the previous week.

#### Virology

• HHD receives electronic lab reports from clinical labs. During week 40, the volume of flu tests received remained comparable to the previous week. Flu A activity accounts for 99% of the cumulative flu positives this season.

#### **Texas**

• The proportion of outpatient visits for ILI (2.09%) was below the baseline (4.76%) and no pneumonia and influenza deaths have been reported in Texas during the 2019-2020 flu season. No influenza-associated pediatric death was reported during week 40. No influenza-associated pediatric deaths have been reported in Texas during the 2019-2020 influenza season. No institutional outbreak was reported in long-term care facilities, and no school outbreaks or school closures reported during week 40 during the 2019-2020 season.

#### **National**

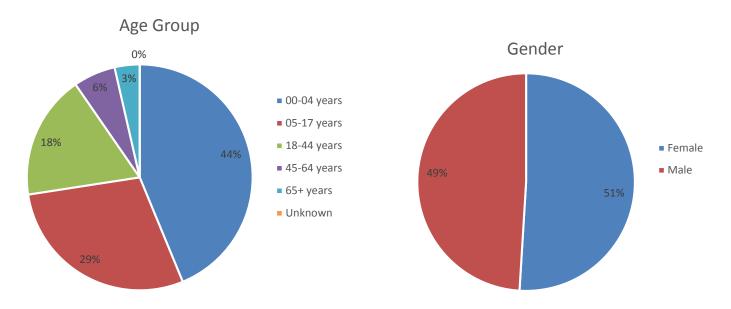
• At the national level during week 40, 1.37% of specimens tested and reported to the CDC by clinical labs were positive for influenza.



## Syndromic Surveillance: ILI activity trend in 2019-2020



### Syndromic Surveillance: 2019-2020 Influenza Season Age and Gender Distribution

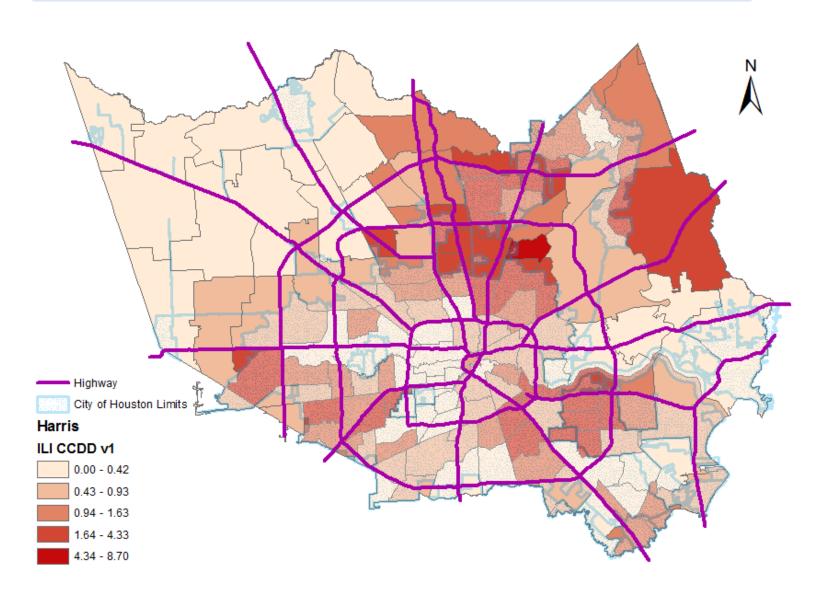


During week 40, 0.87% of emergency center (EC) visits were due to influenza-like illness (ILI) complaints. Of the 1341 patients presenting with ILI, the age group that recorded the most EC visits was the 00 to 04 years old (44%). Females accounted for 51% of patients presenting with ILI.

NOTE: ILI activity is assessed using information provided by the Southeast Texas Syndromic Surveillance System and includes data from 77 hospitals and 17 school-based clinics. Influenza-like illness (ILI) is defined as the mention of fever AND cough, OR fever AND sore throat, OR flu in the patient's Emergency Department (ED) chief complaint. These data do not represent laboratory confirmed cases of influenza nor do they represent all ED visits in Houston/Harris County.



# Syndromic Surveillance: Geographic Distribution Map of ILI



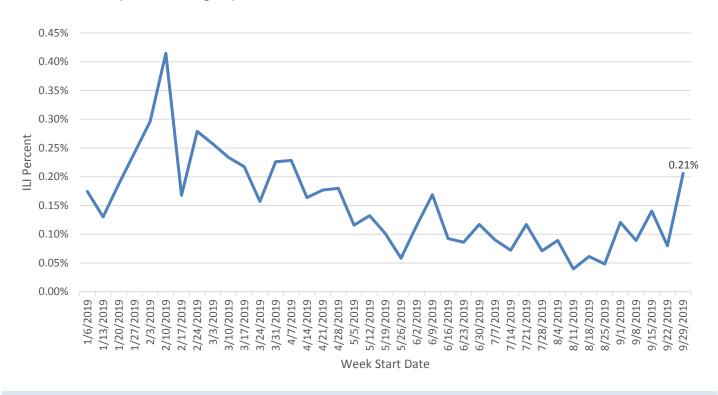
During week 40, the zip codes with the highest percent of ED visits (2.19 or greater) were:

77074, 77503, 77037, 77039, 77502, 77093, 77016, 77587, 77506 and 77050.

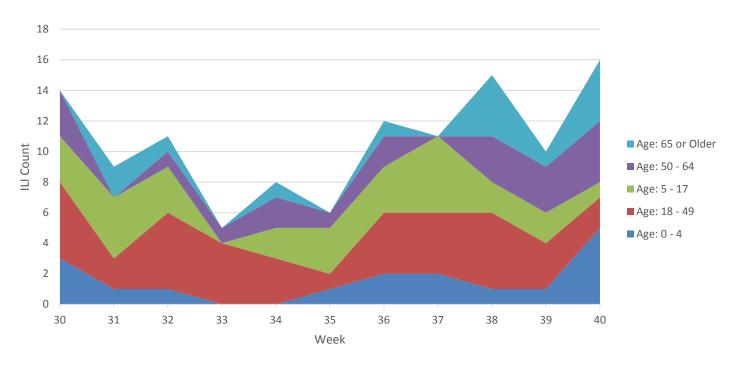
NOTE: Houston/Harris County ILI report distribution map was created using data provided by the Southeast Texas Syndromic Surveillance System and includes data from 77 hospitals and 17 school-based clinics. This map reflects the number of ILI cases from each residential zip code during the current week of reporting. Influenza-like illness (ILI) is defined as the mention of fever AND cough, OR fever AND sore throat, OR flu in the patient's ED chief complaint. These data do not represent laboratory confirmed cases of influenza nor do they represent all ED visits in Houston/Harris County.



# Athena: ILI percentage per week from 2019-2020

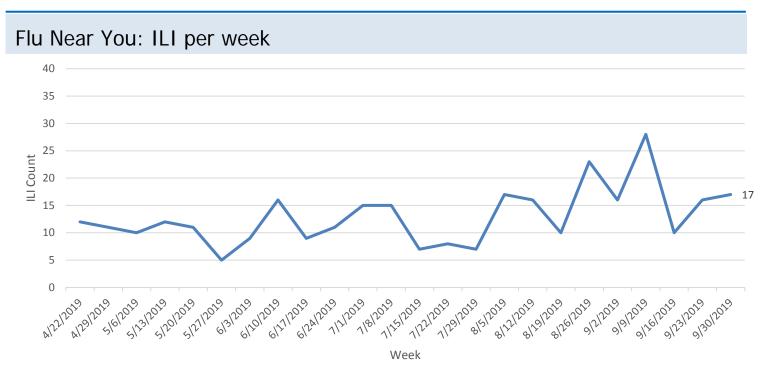


# Athena: ILI per week by age group



In week 40, ILI accounted for 0.21% of outpatient visits in the Athena network. The total count of ILI visits reported within the network was 16.





Flu near You (FNY) is a participatory surveillance tool that compliments traditional disease surveillance. The count of Flu Near You (flunearyou.org) users reporting ILI in the week of 09/30/2019 increased to 17 from the previous week. See the last page for information on how to participate.

## School Surveillance August 2019 - May 2020

Table 1: ILI and Influenza Cases by Type and School Type<sup>1</sup> per Month

| Month | Total<br>Cases | Lab<br>Confirmed |      | Flu A | Flu B | A+B | Unclassified | Elem<br>Schools | Middle<br>Schools | High<br>Schools | Multi-level<br>schools |
|-------|----------------|------------------|------|-------|-------|-----|--------------|-----------------|-------------------|-----------------|------------------------|
| Aug   | 1              | 1                | 100% | 1     | 0     | 0   | 0            | 1               | 0                 | 0               | 0                      |
| Sep   | 32             | 4                | 13%  | 0     | 0     | 0   | 4            | 18              | 2                 | 12              | 0                      |
| Oct   |                |                  |      |       |       |     |              |                 |                   |                 |                        |
| Nov   |                |                  |      |       |       |     |              |                 |                   |                 |                        |
| Dec   |                |                  |      |       |       |     |              |                 |                   |                 |                        |
| Jan   |                |                  |      |       |       |     |              |                 |                   |                 |                        |
| Feb   |                |                  |      |       |       |     |              |                 |                   |                 |                        |
| Mar   |                |                  |      |       |       |     |              |                 |                   |                 |                        |
| Apr   |                |                  |      |       |       |     |              |                 |                   |                 |                        |
| May   |                |                  |      |       |       |     |              |                 |                   |                 |                        |
| Sum   | 33             | 5                | 15%  | 1     | 0     | 0   | 4            | 19              | 2                 | 12              | 0                      |

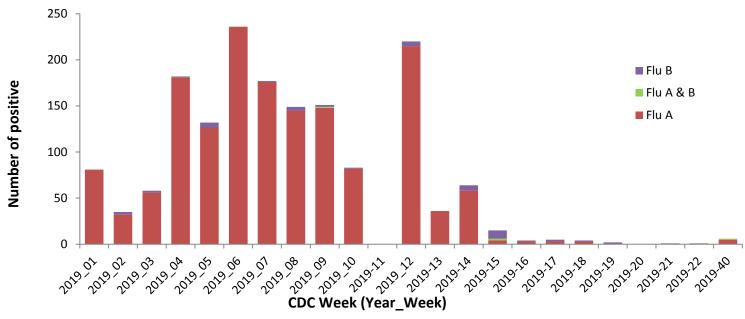
School surveillance for ILI began in August for the current flu season. In September, a total of 32 cases were reported. The highest number of cases (18) were among elementary school students.

NOTE: Data on student ILI and influenza cases is collected from 306 schools within Houston Independent school district. School will be counted more than once if more than one case from the same school is reported during the same reporting period.



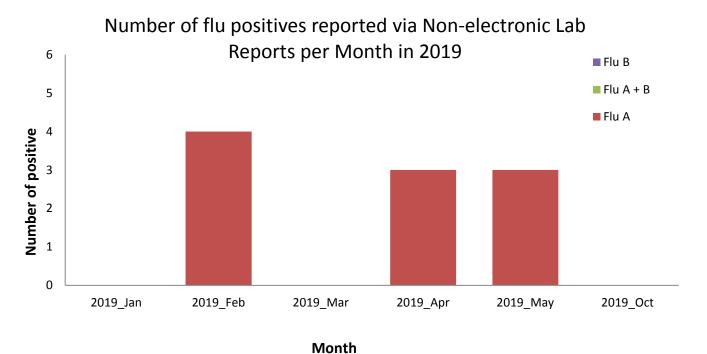
### Passive Viral Surveillance, Electronic lab reports

#### Number of flu positives reported via Electronic Lab Reports per Week in 2019



HHD receives electronic lab reports from clinical laboratories. In Week 40 of 2019, there were 9 laboratory confirmed influenza cases\*\*\*.

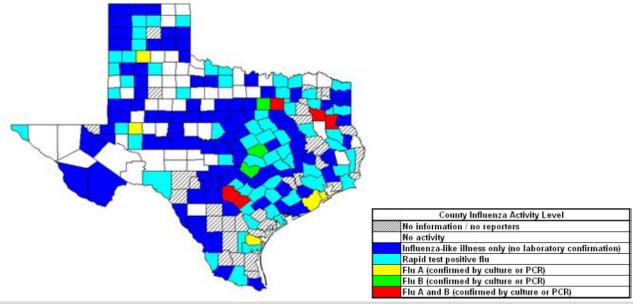
### Passive Viral Surveillance, Nonelectronic lab reports



HHD received 0 nonelectronic lab reports of flu-positive results from clinical laboratories during this reporting period. February accounts for the highest counts (n=4) of Flu activity in 2019.

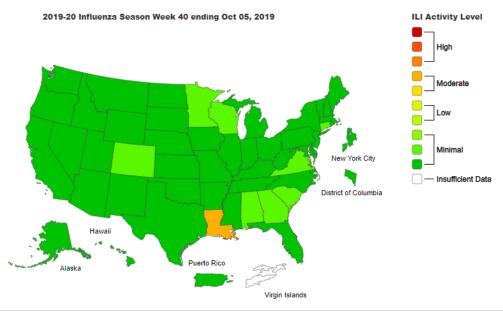


## Texas and National Influenza and ILI Activity



NOTE: Influenza activity level corresponds to current MMWR week only and does not reflect previous weeks' activity. Most of influenza cases are not reportable by law to the Texas Department of State Health Services. This map contains data from sentinel sites and does not represent all influenza cases in the state. Positive laboratory results are reported according to specimen collection date or date received in the lab if the former is unknown. <a href="http://www.dshs.texas.gov/IDCU">http://www.dshs.texas.gov/IDCU</a>.

# A Weekly Influenza Surveillance Report Prepared by the Influenza Division Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet



NOTE: Data collected in ILINet are used to produce a measure of ILI activity by state. Activity levels are based on the percent of outpatient visits in a state due to ILI and are compared to the average percent of ILI visits that occur during spring and fall weeks with little or no influenza virus circulation. This map uses the proportion of outpatient visits to health care providers for ILI to measure the ILI activity level within a state. It does not, however, measure the extent of geographic spread of flu within a state. Therefore, outbreaks occurring in a single city could cause the state to display high activity levels. Data collected in ILINet may disproportionately represent certain populations within a state, and therefore may not accurately depict the full picture of influenza activity for the whole state. https://www.cdc.gov/flu/weekly/



# The Houston Influenza Surveillance Weekly Report is available on the Houston Health Department web site at:

https://www.houstontx.gov/health/Epidemiology

Flu Near You is a participatory surveillance (crowd sourcing) tool which complements traditional disease surveillance activities. Registered users can obtain real-time information on flu activity and influenza vaccines in the Greater Houston Metropolitan Area. Flu Near You features include:

- Report symptoms
- Find vaccines
- Map flu cases in the Greater Houston Metropolitan area
- Get flu news
- Share on social media

This season HHD invites you to register for Flu Near You at https://flunearyou.org



#### NOTE:

Influenza-like Illness (ILI) is defined as fever (temperature  $\geq 100^{\circ}F$ ) plus a cough OR a sore throat, in the absence of a known cause other than influenza.

Houston ILI baselines were determined using the same method as the Centers for Disease Control and Prevention Regional ILI baseline.

Data was obtained or accessed through the Southeast Texas Syndromic Surveillance System. However, any conclusions drawn from use of this data do not represent the official views of any consortium member jurisdiction.

Additional information regarding Houston, Texas and national ILI activity can be accessed at:

http://www.houstontx.gov/health/

http://www.dshs.texas.gov/IDCU/disease/influenza/surveillance/2019.aspx

http://www.cdc.gov/flu/weekly/

http://www.who.int/csr/don/en/

\*Below baseline means the % of visits for ILI is below the region-specific baseline of 4.0%. https://www.cdc.gov/flu/weekly/overview.htm

The numbers for pediatric flu-related deaths may change as information becomes available.

### Houston Health Department

Division of Disease Prevention and Control

**Public Health Informatics** 

8000 N. Stadium Dr., 4th Floor Houston, TX 77054

Main Phone Number: (832) 393-5080 Disease Reporting Fax Number: (832) 393-5232

<sup>\*\*</sup> Flu-related deaths in adults are not required to be reported to the health department. Numbers for flu-related deaths may change as information becomes available.

<sup>\*\*\*</sup> During MMWR week 11, electronic laboratory reporting (ELR) was interrupted due to system outage.